

Soshkin V.E. The technology assimilation of production and usage of high temperature refractory materials and products on the base of ceramic fibers.

Limited company «Fibrous refractories» is the developer of technologies and the producer of modern effective materials and products for high temperature isolation on basis of silica-alumina fibres and inorganic connectives on their own production basis. The main items of production are: wet thick felt, precast shapes and special purpose products, blocks, boards, cardboards; they are hard large sized molded products with fibrous structure in the form of parallelepiped.

Key words: *materials and products for high temperature isolation.*

Melnikov I.A., Budanov E.N. Pouring automation on automatic molding lines HWS-Sinto, Germany, provides additional economy and quality

The article gives the detailed description of pouring units for molding lines and control of pouring and modification process for quality and economy improvement. The author also underlines advantages of continuous modernization of foundry equipment.

Key words: *pouring automats integrated in molding line, pouring process control and analysis.*

Voronin J.F., Voronin S.J., Chernyshova N.A., Badeshko S.K. The quality analysis castings «the Frame lateral» for cars RJD

The materials presented in article consider the basic defects of casting «Frames lateral», being most difficult casting in RJD. Are in detail resulted arising in castings defects, the nature of their occurrence, in the short form ways of liquidation and fuller in the resulted literature is considered.

For fast perception and the further logic judgement of processes of occurrence of considered defects proceeding in the foundry form castings РЖД, «The System of development of logic skills of manufacturing castings free of defects can be used developed». The system of consultation of founders of factories on struggle against marriage castings through the Internet is applied.

Key words: *casting, quality, moulding marriage, the system approach, secondary oxidation, a hot crack, a shrinkable bowl, marriage liquidation.*

Kulakov B.A., Rybakov S.A. It is necessary to help to forward runners (foundry news from Chelyabinsk regeon).

On Zlatoustovskiy foundry plant «Metaplast» was commissioned the modern molding plant of lost foam casting on the base of equipment from company GEMCO, Holland.

Key words: *lost foam casting.*

Boldiryev D. A., Gharkov V. I. The influence research of gray iron microalloying for «engine block» casting by chromium and sulfur on complex of main and special properties.

The work is directed to assimilation of first class gray iron with flaked graphite with advanced mechanic and special properties on the base of standard cast iron Gh190B (the intermediate type between Sch25 and Sch30, appr. correspond to Sch27) for production of «engine block» details castings of perspectives automobiles models. It was researched the influences of chemical composition, microstructure parameters and other strength properties of gray cast iron in «engine block» castings on their machinability by cutting tool and wear resistance of friction pair «engine block cylinder piston ring».

Key words: *microalloying, wear resistance, machinability, carbide-formers, X-ray microanalysis.*

Skaland T. Production of high duty cast iron. Comparison of alternative methods of high duty cast iron treatment with magnesium.

The article gives a short review of different processes of cast iron treatment with magnesium and production of high duty cast iron, using at present time on foundry plant around the world. The main advantages and disadvantages of different treatment methods are described.

Key words: *high duty cast iron, high duty cast iron treatment methods.*

Philippova I.A., Belov V.D., Dibrov I.A. The aluminum alloys inoculation by ligature Al5TiB, chilled from liquid condition.

At the article are presented the results of comparative investigations of structure and properties of aluminum alloy AK7M2, inoculated by Al5TiB ligature having the cylindrical bare shape $\varnothing 9,5$ mm, producing by metallurgical industry and flat plate shape 0,5 mm thickness, produced by quenching from liquid condition.

Key words: *inoculating ligature, quenching from liquid condition.*

Mukhomorov I.A. Reconstruction of core production area. The questions of molding sand preparation.

About the development of the project and selection of the equipment for production of big cores with weight up to 80 kg on very limited area of foundry shop. It is given the analysis of different types of mixers and sand preparation systems. It is suggested the parameters which should be respected by: sand preparation system, «ideal» molding and reclaimed sand. It is given the recommendations of correct selection of sand preparation system.

Key words: *company PRIMAFOND, core machine, core dryer, Amin_process, mixers, sand preparation system, « clusters», «ideal» mixture, clay shell, energy capacity.*

Leushin I.O., Plokhov S.V. Concerning the possibility of utilizing used investment casting waxes in lubricants for high-pressure die casting dies.

This paper addresses the prerequisites for a simultaneous solution to the two problems of the modern foundry industry: recycling of used investment casting waxes; choosing of inexpensive effective lubricants for high-pressure die casting dies.

Key words: *wax, investment casting, high-pressure die casting, die, lubricant.*